

In our touchscreen word learning task, 30-month-olds perform better in a **passive** context.

Word learning from a touchscreen app: 30-month-olds learn better in a passive context

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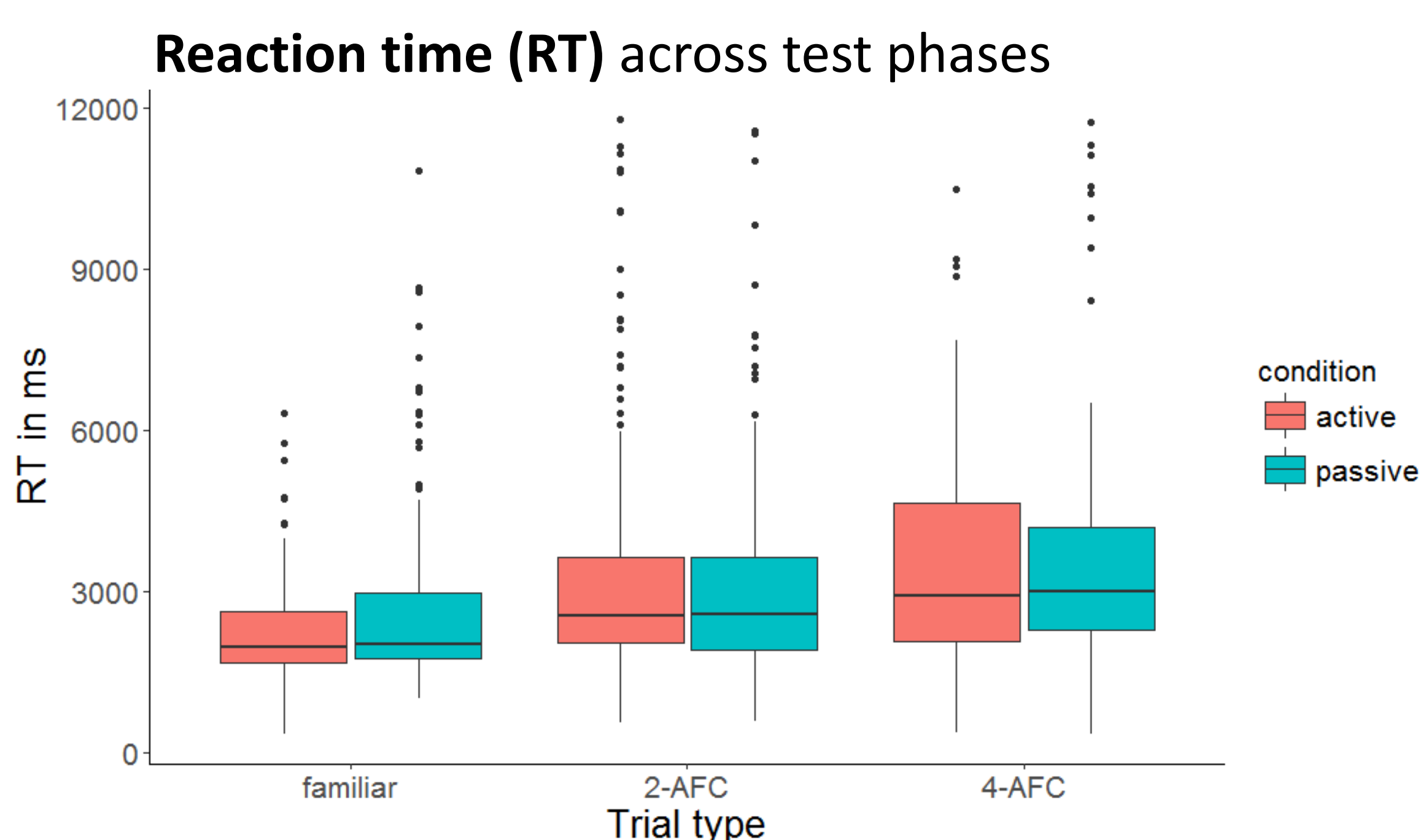
INTRO

- Popularity of touchscreen devices and educational apps has skyrocketed
- How do children learn from interactive touchscreen apps? → **Mixed evidence**
- How does an **active choice** affect word learning in 30-month-olds?

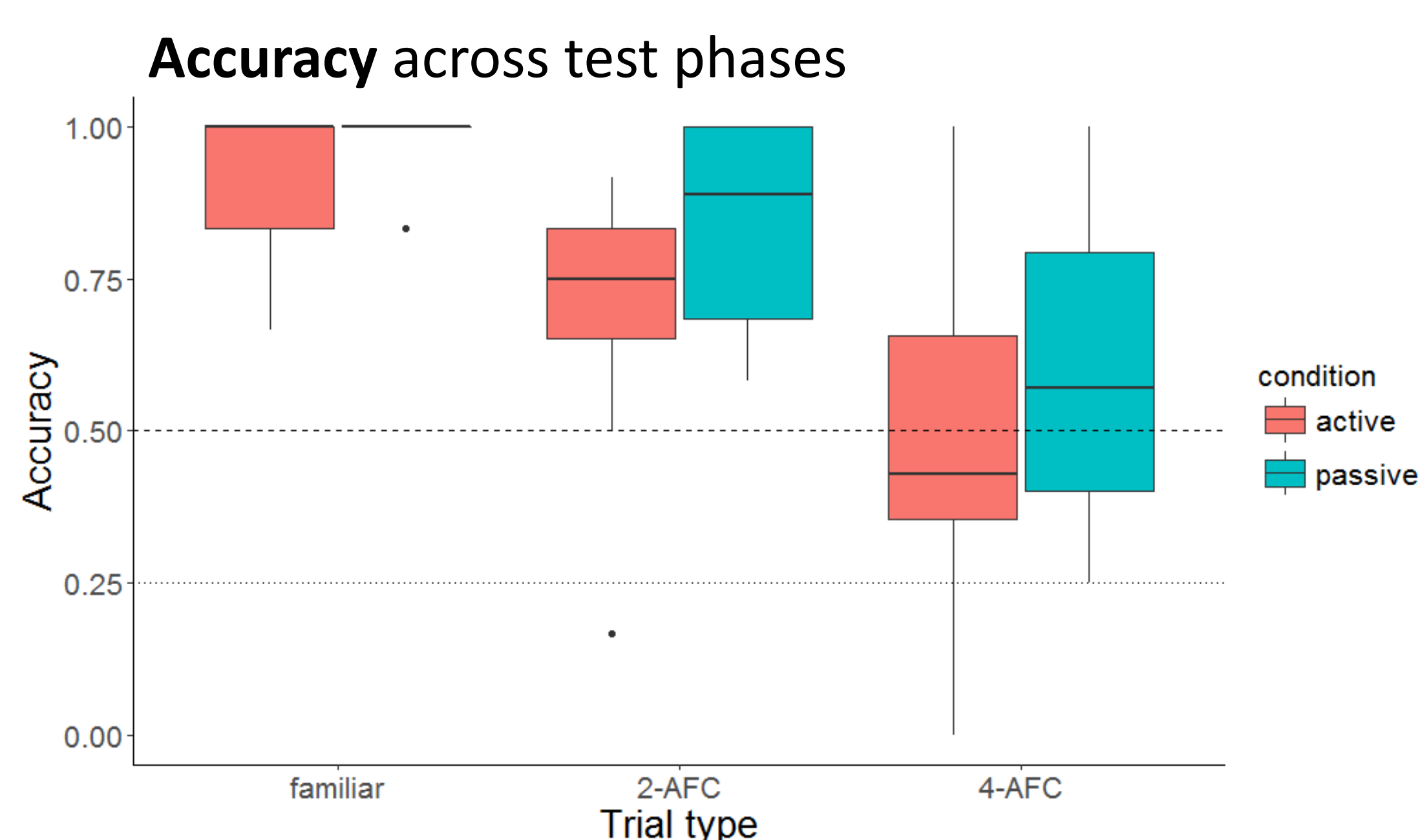
METHODS

- N = 34 (17 pairs, 30 months old, German)
- **Active** (choice) vs. **passive** (no choice) condition → yoked control group
- 4 word-learning trials, 6 familiar test trials, 12 2-AFC test trials, 8 4-AFC test trials
- t-tests and GLMM to analyze reaction time and accuracy

RESULTS



RESULTS (continued)

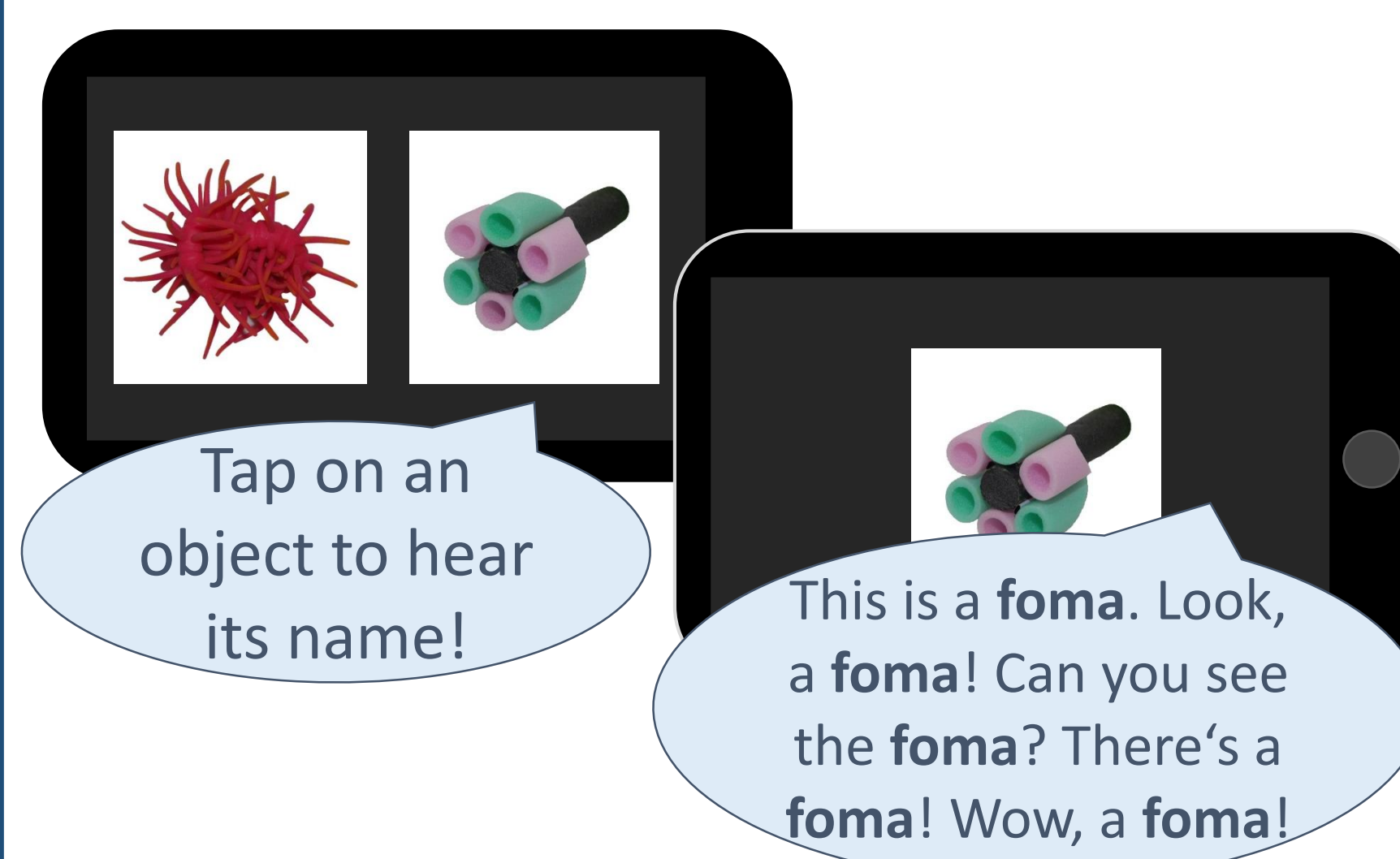


- **Passive** children outperform their **active** counterparts (in later trials) without differences in RT

DISCUSSION

- **No benefit** of active learning
- Developmental trajectory?
- Tapping as a prepotent response
- Cognitive and locomotor **constraints** need to be taken into account when designing educational apps

ADDITIONAL INFORMATION



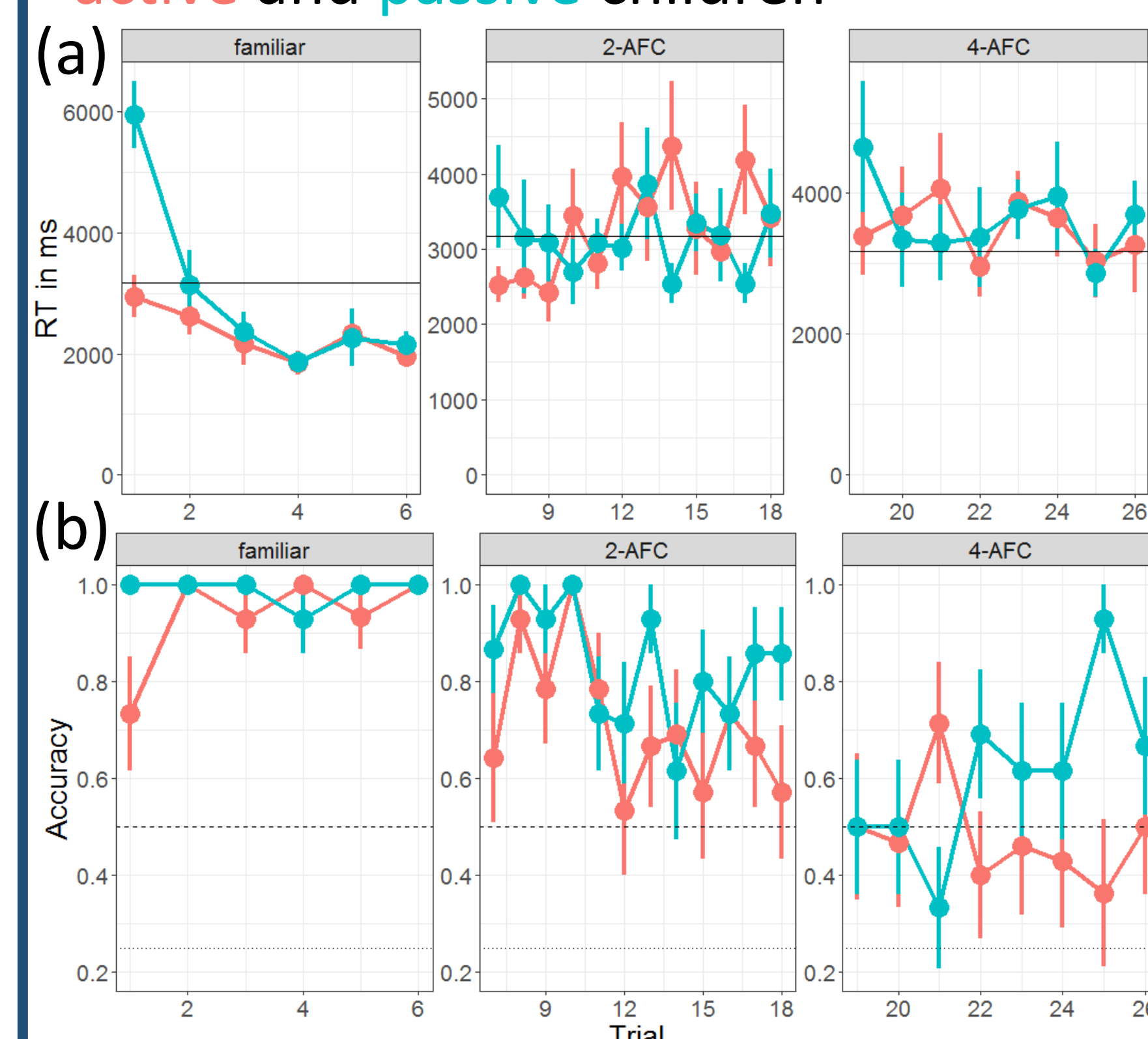
Parameter estimates for 2-AFC

Parameter	Estimate	SE	z	p
Intercept	2.42	0.81	2.98	<0.001 ***
Passive condition	0.79	1.19	0.66	0.507
Test order	-0.12	0.04	-2.30	0.021 *
Male gender	0.38	0.44	0.86	0.389
Condition * test order	0.01	0.08	0.115	0.909

Parameter estimates for 4-AFC

Parameter	Estimate	SE	z	p
Intercept	1.09	2.13	0.52	0.607
Passive condition	-6.42	3.08	-2.08	0.038 *
Test order	-0.07	0.09	-0.74	0.460
Male gender	0.61	0.43	1.44	0.150
Condition * test order	0.32	0.14	2.31	0.021 *

RT (a) and accuracy (b) across trials for **active** and **passive** children



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